

Claims

1. A microwave oven comprising:

a cavity for accommodating food to be cooked, of which
5 at least one side defining an opening;

a door for shielding the opening selectively;

a magnetron disposed at an outside of the cavity, for
generating microwave;

10 a waveguide for guiding the generated microwave into
the cavity;

a stirrer fan disposed at an outlet of the waveguide,
for scattering the microwave guided by the waveguide;

a motor fixed at an outside of the waveguide and of
which shaft is connected with the stirrer fan;

15 a screw covering part formed by modifying a portion of
the waveguide to accommodate a motor fixing screw;

a convergence preventing part formed at a portion of
the cavity, with a shape corresponding to that of the screw
covering part and at a location corresponding to that of the
20 screw covering part; and

an elevated portion formed by modifying a portion of
the cavity, for uniformly distributing the microwave
scattered by the stirrer fan.

25 2. The microwave oven according to claim 1, wherein
the waveguide is provided at an upper side and/or a lower
side of the microwave oven.

30 3. The microwave oven according to claim 1, wherein
the convergence preventing part is formed with a recessed
shape toward an inside of the cavity.

35 4. The microwave oven according to claim 1, wherein
the convergence preventing part is formed around the stirrer
fan at the corresponding location.

5. The microwave oven according to claim 1, wherein the elevated portion is protruded toward an inside of the cavity.

5 6. The microwave oven according to claim 1, wherein the elevated portion is formed at an outside of the stirrer fan.

7. The microwave oven according to claim 1, wherein
10 the elevated portion has a substantially hemispheric shape.

8. The microwave oven according to claim 1, wherein the number of the elevated portion is plural and the plurality of elevated portions are arranged facing each other
15 around the stirrer fan.

9. The microwave oven according to claim 1, wherein the elevated portion is integrally formed with a plate of the cavity.
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10. A microwave radiating structure of a microwave oven comprising:

a magnetron disposed at an outside of a cavity, for generating microwave;

25 a waveguide for guiding the generated microwave into the cavity;

a stirrer fan disposed at an outlet of the waveguide, for scattering the microwave guided by waveguide;

30 a motor fixed at an outside of the waveguide and of which shaft is connected with the stirrer fan; and

a convergence preventing part provided at nearby position of the motor, the convergence preventing part being recessed toward an inside of the cavity.

35 11. The microwave radiating structure according to claim 10, wherein the waveguide is modified to form a screw

covering part at a position where the motor is fixed, and the convergence preventing part is formed with a shape corresponding to that of the screw covering part and at a location corresponding to that of the screw covering part.

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12. The microwave radiating structure according to claim 10, wherein the number of the convergence preventing part is plural and the convergence preventing parts are arranged around the stirrer fan at the corresponding locations.

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13. The microwave radiating structure according to claim 10, wherein the stirrer fan is provided at an upper side and/or lower side of the cavity.

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14. The microwave radiating structure according to claim 10, wherein the convergence preventing part is formed by modifying the waveguide.

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15. A microwave radiating structure of a microwave oven comprising:

a cavity in which food is loaded;

a waveguide guiding a microwave into the cavity;

a motor disposed at an outlet of the waveguide;

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a stirrer fan connected with the motor by a shaft coupling, for scattering the microwave; and

an elevated portion formed by modifying a plate of cavity, for uniformly distributing the scattered microwave about the cavity.

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16. The microwave radiating structure according to claim 15, wherein the elevated portion is protruded from the plate of the cavity toward an inside of the cavity.

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17. The microwave radiating structure according to claim 15, wherein the elevated portion is positioned at an

outside of the stirrer fan.

18. The microwave radiating structure according to
claim 15, wherein the number of the elevated portion is
5 plural.

19. The microwave radiating structure according to
claim 18, wherein the plurality of elevated portions are
arranged facing each other around the stirrer fan.
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20. The microwave radiating structure according to
claim 15, wherein the elevated portion is integrally formed
with the plate of the cavity.
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